

## CLAIMS

1. A valve (110) comprising a shutter (20) placed in a chamber (12) provided in a valve body, an end of said chamber being provided with a seat (116) against which a flap-forming part of the shutter rests in a closed position of the valve and is remote there from in a open position of the valve and a magnetic control device including shutter magnetic drive means (130) disposed outside the chamber for moving it either to its closed position or to its open position, characterized in that the magnetic control device further comprises at least one ball (123) which is made of a magnetic material, disposed in the chamber and which is coupled to the external magnetic drive means (130), said ball being associated with the shutter in such a way that said shutter is driven in the chamber (12) when said ball is itself moved by the external magnetic drive means.
2. The valve as claimed in claim 1, characterized in that the ball (123) turns freely relative to the shutter (20).
3. The valve as claimed in either claim 1 or claim 2, characterized in that the shutter (20) includes at least one housing (124, 824) in which at least one ball is placed.
4. The valve as claimed in any one of claims 1 to 3, characterized in that it is adapted to center the shutter in the valve body.
5. The valve as claimed in claim 4, characterized in that the shutter is associated with at least two balls that cooperate with it and the valve body to

provide centering by the external magnetic drive means.

- 5 6. The valve as claimed in claim 4, characterized in that centering means (324) are disposed inside the chamber, on its lateral wall, so as to cooperate with the shutter.
- 10 7. The valve as claimed in claim 4, characterized in that centering means (324) are disposed on the shutter so as to cooperate with the internal lateral wall of the chamber.
- 15 8. The valve as claimed in either claim 6 or claim 7, characterized in that the centering means are fins (524; 825).
- 20 9. The valve as claimed in any one of the preceding claims, characterized in that said shutter is associated with at least two balls offset longitudinally relative to the axis of the shutter.
- 25 10. The valve as claimed in any one of the preceding claims, characterized in that at least one section of the shutter is associated with at least two balls that are offset angularly relative to each other.
- 30 11. The valve as claimed in any one of the preceding claims, characterized in that two separate sections of the shutter are each associated with at least two balls disposed so that the angular offset between two successive balls of a same section is less than or equal to  $180^\circ$ .
- 35 12. The valve as claimed in any one of the preceding claims, characterized in that the (n) balls of a

section are offset angularly by an angle equal to  $360^\circ/n$ .

- 5      13. The valve as claimed in any one of the preceding claims, characterized in that at least one fluid passage groove (113) is machined in the inside wall of said chamber (12) and a rolling area (114) is formed on either side of said groove.
- 10      14. The valve as claimed in any one of the preceding claims, characterized in that the drive means (130) placed outside the valve body are adapted to be moved along a direction (133) parallel to the longitudinal axis (A1) of the valve so as to drive the at least  
15      one ball (123) simultaneously.
15. The valve as claimed in claim 14, characterized in that the drive means (130) comprise at least one magnet.